

(b) (7)(C), (b) (7)(D)

Page 1

**Accept**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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**Setup Start**

**Stop**

Figure 1: A schematic diagram of a 1D photonic crystal. It shows a periodic structure of alternating layers with refractive indices  $n_1$  and  $n_2$ , and thicknesses  $d_1$  and  $d_2$ . The total thickness of the crystal is  $L$ . The incident light is represented by a plane wave with wave vector  $k$  and frequency  $\omega$ . The reflected and transmitted waves are also shown.

**Cust Item ID:**

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

**Customer:**

**Reference:**

Run Start

Date: 10-6-17

**Tooling:**

**Date:**

**QC:**

**Date:****SPC (Y/N):****Date:**

**Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
D2161	Rev B2								
100		0.00							
	DOCUMENT CONTROL								
DC	<b>Memo</b>	0.00							
Document Control	Photocopy bluefile and create labels as per PPP D212-580-041 CHG003				S 10/06/29				HJ for BG 10/06/29
110		0.00							
	Large Fab								
Large Fab	<b>Memo</b>	0.00							
Large Fab	1-Assemble on Jig DT8065 as per Dwg D2161 □ 2-Weld as per Dwg D2161 Identify as D2161-212 □ A/R SS ROD Batch: M108/60								E 10-6-28 (74)
120		0.00							
	QC5- Inspect part completeness to step on W/O								
QC	<b>Memo</b>	0.00							
Quality Control					S 10/06/28				(TIC)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 59933

Thursday, June 17, 2010 12:56:30 PM



Page 2

Item ID: D212-580-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Cargo Mirror Assembly

Start Date: 6/17/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 6/24/2010 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

⑨ PD 10.06.28

140

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 3:20

FINISH TIME: 3:50

OVEN TEMPERATURE:

3:50

⑨ 16/ 10-6-28.

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

=> M 10/06/25

✓ d

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 59933**

Thursday, June 17, 2010 12:56:30 PM

Page 3

Item ID: D212-580-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Cargo Mirror Assembly

Start Date: 6/17/2010 Start Qty: 4.00

Cust Item ID:

Required Date: 6/24/2010 Req'd Qty: 4.00

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursTool ID Tool # Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

10-6-29

42

170

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

S 12/06/09

FY

180

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D212--580-  
041 □ Location: 24 □ PPP Rev: 9

10-6-29

40

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 17, 2010 12:56:34 PM

Page 1

Work Order ID: 59933

Parent Item: D212-580-041

Parent Item Name: Cargo Mirror Assembly

Start Date: 6/17/2010

Required Date: 6/24/2010

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:H Removed D2013-3/-4 06-03-22 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of, Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	---------------------	----------------	-------------	--------------	---------------	----------------	--------

MS27039-1-08

Purchased

No

100

Each

1,427.000

4

16

Screw

Location

Loc Qty

Loc Code

ST291

1427

110552

44

110835

1183

114718

200

D2013-3

Manufactured

No

110

Each

0.0000

1

4

Mirror Bracket LH, 212

B 60053 x4

D2013-4

Manufactured

No

110

Each

0.0000

1

4

Mirror Bracket RH, 212

B 60054 x4

CCR264SS3-2

Purchased

No

170

Each

208.0000

4

16

Rivet, Cherry

Location

Loc Qty

Loc Code

ST311

208

106578

45

108738

63

112314

100

D2011-103

Manufactured

No

170

Each

46.0000

2

8" Mirror

Location

Loc Qty

Loc Code

ST226

46

58399

46



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 17, 2010 12:56:34 PM

Page 2

Work Order ID: 59933

Parent Item: D212-580-041

Parent Item Name: Cargo Mirror Assembly

Start Date: 6/17/2010

Required Date: 6/24/2010

Start Qty: 4.00

Required Qty: 4.00

D2037-101

Manufactured No

170 Each

4.0000

1

4



Arm



EL

10-6-28

## Location

## Loc Qty

## Loc Code

WA

4

52272

4

4

MS21059L3

Purchased No

170 Each

96.0000

2

8



Nut Plate



10-6-29 sf 40

## Location

## Loc Qty

## Loc Code

ST301

85

114718

85

8

ST302

11

113749

10

114456

1

Thursday, June 17, 2010 12:56:34 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector


Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

RSIC-617

FINISH: ~~POWDER COAT ASSEMBLY BLACK~~  
~~CRINKLE (4.3.5.3) PER DART QSI 005 4.3~~  
 POWDER COAT BLACK SANDTEX (4.3.5.7) PER  
 DART QSI 005 4.3 

ALL INFORMATION CONTAINED  
HEREIN IS UNCLASSIFIED  
DATE 08-22-2011 BY 60322 UCBAW

RELEASED  
JUN 99 06 10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

## 4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D204-562-041	5.0 lb	0 in	0 lb-in	3.80 in	19.0 in-lb
Dual Mirror Installation	2.3 kg	0 m	0 kg-m	0.10 m	0.23 m-kg
D205-563-041	5.0 lb	0 in	0 lb-in	3.80 in	19.0 in-lb
Dual Mirror Installation	2.3 kg	0 m	0 kg-m	0.10 m	0.23 m-kg
D212-580-041	5.0 lb	0 in	0 lb-in	-5.25 in	-26.3 in-lb
Dual Mirror Installation	2.3 kg	0 m	0 kg-m	-0.13 m	-0.30 m-kg

## 5.0 PARTS LIST

Qty 562 -041	Qty 563 -041	Qty 580 -041	Part Number	Description
X			D204-562-041	DUAL MIRROR INSTALLATION
	X		D205-563-041	DUAL MIRROR INSTALLATION
		X	D212-580-041	DUAL MIRROR INSTALLATION
2	2	2	D2011-103	MIRROR
1			D2161-204	MIRROR BRACKET
	1		D2161-205	MIRROR BRACKET
		1	D2161-212	MIRROR BRACKET
*2	*2	*2	D3015-3	LOCKNUT
*2	*2	*2	AN960JD516	WASHER
		4	CCR264SS-3-2	RIVET, BLIND
		2	MS21059L3	NUTPLATE
4	4	4	MS27039-1-08	SCREW

\*PARTS ARE INCLUDED WITH D2011-103 MIRROR.